

What is claimed is:

1. A method of fabricating a micromachined structure suspended above a substrate using a sacrificial layer, the method comprising the step of stacking an anti-stiction layer that is operative to be removed by dry etching one of before and after stacking the sacrificial layer.

2. The method of claim 1, wherein the anti-stiction layer is formed of one of polymer and polycrystalline silicon.

3. The method of claim 1, wherein the anti-stiction layer is formed of photoresist.

4. The method of claim 1, wherein the sacrificial layer is formed of one selected from the group consisting of phosphosilicate glass (PSG), silicon oxide, low temperature oxide, copper, iron, molybdenum, nickel, chrome, and tetraethylorthosilicate glass (TEOS).

5. A method of fabricating microstructures, the method comprising:  
preparing a substrate;

forming an anti-stiction layer that is removed by dry etching on the substrate;

forming a sacrificial layer that is removed by wet etching on the substrate;

5 removing parts of the anti-stiction layer and the sacrificial layer so that a part of the substrate is exposed and forming a resulting structure including a post; and

forming at least one structure layer for forming at least one microstructure over the resulting structure.

6. The method of claim 5, wherein the anti-stiction layer is formed of one of polymer and polycrystalline silicon.

7. The method of claim 5, wherein the anti-stiction layer is formed of photoresist.

8. The method of claim 5, wherein the sacrificial layer is formed of one selected from the group consisting of phosphosilicate glass (PSG), silicon oxide, low temperature oxide, copper, iron, molybdenum, nickel, chrome, and tetraethylorthosilicate glass (TEOS).

9. A method for fabricating microstructures, the method comprising:

preparing a substrate;

forming an anti-stiction layer on the substrate;

forming a sacrificial layer on the anti-stiction layer;

5 forming at least one structure layer for creating at least one microstructure on the sacrificial layer; and

removing the sacrificial layer by a first etching and removing the anti-stiction layer by a second etching in order to release the at least one microstructure.

10. The method of claim 9, wherein the anti-stiction layer is formed of one of polymer and polycrystalline silicon.

11. The method of claim 9, wherein the anti-stiction layer is formed of photoresist.

12. The method of claim 9, wherein the sacrificial layer is formed of one selected from the group consisting of phosphosilicate glass (PSG), silicon oxide, low temperature oxide, copper, iron, molybdenum, nickel, chrome, and tetraethylorthosilicate glass (TEOS).

13. The method of claim 9, wherein the first etching is a wet etching.

14. The method of claim 9, wherein the second etching is a dry etching.

15. A method of fabricating microstructures, the method comprising:

preparing a substrate;

forming a sacrificial layer on the substrate;

forming an anti-stiction layer on the sacrificial layer; and

5 forming at least one structure layer for forming at least one microstructure on the anti-stiction layer and removing the sacrificial layer by wet etching while removing the anti-stiction layer by dry etching in order to release the at least one microstructure.